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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,515

07/14/2004

Rolf-Juergen Recknagel

2941

4463

7590

03/09/2006

Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

EXAMINER

BARAN, MARY C

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,515

Applicant(s)

RECKNAGEL ET AL.

Examiner

Mary Kate B. Baran

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on 10 January 2006. Claims 1-10 are pending. Claims 1-10 are amended.
2. The amendments filed 10 January 2006 are sufficient to overcome the prior objections to the specification, abstract and drawings and the prior 35 U.S.C. 112 second paragraph and 35 U.S.C. 101 rejections.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. Patent No. 5,814,897) (hereinafter Ito) in view of Dalum (U.S. Patent No. 6,236,308).

Referring to claim 1, Ito teaches a method for collision detection (see Ito, column 6 lines 18-22); comprising the following steps: providing a sensor (see Ito, column 5 lines 29-30); transmitting an unfiltered output signal of the sensor to threshold value decider (see Ito, column 5 lines 40-48); comparing the unfiltered signal with a predetermined plausibility threshold (see Ito, column 5 lines 40-52); detecting the

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collision on the basis of the comparison and another signal (see Ito, column 5 lines 48-52); but does not teach transmitting an unfiltered output signal of the sensor to a low pass filter and detecting a collision on the basis of the filtered signal.

Dalum teaches transmitting an unfiltered output signal of the sensor to a low pass filter and detecting a collision on the basis of the filtered signal (see Dalum, column 3 lines 1-20 and lines 59-63).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Ito to include the teachings of Dalum because determining the collision using a filtered signal would have allowed the skilled artisan to provide a high performance of impact detection.

Referring to claim 2, Ito teaches that is the plausibility threshold is exceeded, a plausibility flag is set (see Ito, column 9 lines 45-65).

Referring to claim 3, Ito teaches that the plausibility flag is transmitted to a processor (see Ito, column 9 lines 45-65).

Referring to claim 4, Ito teaches that the plausibility flag is maintained for a predetermined length of time (see Ito, column 5 lines 40-48).

Referring to claim 5, Ito teaches an apparatus for collision detection (see Ito, column 6 lines 18-22), comprising: a sensor for outputting a signal (see Ito, column 5

lines 29-34); a threshold value decider for the unfiltered signal (see Ito, column 5 lines 40-48); and a processor wherein the processor detects a collision as a function of an output signal of the threshold value decider and another signal (see Ito, column 5 lines 40-48); but does not teach a filter that filters the signal or that the other signal used for collision detection is a filtered signal.

Dalum teaches a filter that filters the signal and that the other signal used for collision detection is a filtered signal (see Dalum, column 3 lines 1-21 and lines 59-62).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Ito to include the teachings of Dalum because determining the collision using a filtered signal would have allowed the skilled artisan to provide a high performance of impact detection.

Referring to claim 6, Ito teaches that the threshold value decider is connected at its output to a hold element in such a way that the hold element keeps the output signal for a predetermined length of time (see Ito, column 5 lines 40-48).

Referring to claim 7, Ito teaches that the sensor can be connected to a control unit, and the control unit has the processor and can be connected to restrain means (see Ito, Figure 2).

Referring to claim 8, Ito teaches that the filter and the hold element are disposed in the control unit (see Ito, Figure 2).

Referring to claim 9, Ito teaches that the filter, the hold element, and a device for analog to digital conversion are disposed in a housing together with the sensor (see Ito, column 6 lines 42-45).

Referring to claim 10, Ito teaches that the sensor is embodied as an acceleration sensor (see Ito, column 5 lines 29-34).

Response to Arguments

4. Applicant's arguments, filed 10 January 2006, with respect to the rejection(s) of claim(s) 1-10 under 35 U.S.C. 102 (b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dalum (U.S. Patent No. 6,236,308).

Applicant argues that Ito does not teach a filter or a filtered signal. While, Ito does teach two embodiments, one using a filtered sensor output and one using an unfiltered sensor output; this limitation is now met by the teachings of Dalum. Dalum teaches obtaining a signal from an acceleration sensor, filtering this signal, and then determining a crash event based on the filtered signal (see Dalum, column 3 lines 1-21 and lines 59-62). It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Ito to include the teachings of Dalum because determining the collision using a filtered signal would have allowed the skilled artisan to provide a high performance of impact detection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B. Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday - Friday from 9:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

25 February 2006


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600